CLAIMS

What is claimed is:

1.   A method for routing calls through a discount telephone service, comprising:

determining whether an outgoing call is a discount call;

collecting the digits corresponding to the discount call; and

dialing the access number for a discount telephone service provider and the digits corresponding to the discount call.

2.   The method according to claim 1, further comprising:

detecting a first predetermined number of DTMF tones corresponding to a discount call.

3.   The method according to claim 2, wherein the determining whether a discount call is made is accomplished by determining whether the first predetermined number of DTMF' tones meets a predetermined sequence of DTMF tones.

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4.   The method according to claim 2, wherein the

determining whether a discount call is made is accomplished

by determining whether the first DTMF tone associated

with a

dialed number is zero.

5.   The method according to claim 2, further

comprising:

     determining whether an access code is

required to effectuate said routing; and

     providing said access code to the telephone

line when said code is required.

6.   The method according to claim 1, wherein the

discount call is an international call.

7.   The method according to claim 1, wherein the

discount call is not a special service call or toll free call.

8.   The method according to claim 2, further

comprising:

     choosing the access number among a plurality

of access numbers for discount telephone providers; and

     dialing the selected access number of the

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9. A method for routing calls through a discount telephone service, comprising:

monitoring phone function keys outgoing call activity;

determining whether the outgoing call is a potential discount call;

detecting the DTMF tones corresponding to a first predetermined number of DTMF tones, wherein the determining whether the outgoing call is a potential discount call is accomplished by determining whether the first predetermined number of at least one DTMF tone meets a predetermined sequence of the DTMF tones;

collecting the digits corresponding to the discount call; and

dialing the access number for a discount telephone provider and the digits corresponding to the discount call.

10. The method according to claim 9, further comprising:

effectuating a re-set state when an initial phone number is entered but not dialed.

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11. The method according to claim 9, further comprising:

determining whether an access code is required to effectuate said routing; and

transmitting said access code through the cell phone when said code is required.

12. The method according to claim 9, wherein the potential discount call is an international call.

13. A system for routing calls through a discount telephone service, comprising:

means for determining whether an outgoing call is a potential discount call;

means for collecting the digits corresponding to the outgoing call; and

means for dialing the access number for a discount telephone service provider and the digits corresponding to the outgoing call.

14. The system according to claim 13, further comprising:

means for detecting a first predetermined

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number of DTMF tones corresponding to a potential discount call.

15. The system according to claim 14, wherein the means for determining whether a discount call is made is accomplished by a means for determining whether the first. predetermined number of DTMF tones meets a predetermined sequence of DTMF tones.

16. The system according to claim 14, wherein the means for determining whether a discount call is made is accomplished by the first DTMF tone associated with a dialed number is zero.

17. The system according to claim 14, further comprising:

means for determining whether an access code is required to effectuate said routing; and

means for providing said access code to the cell phone when said code is required.

18. The system according to claim 13, wherein the potential discount call is an international

19. The system according to claim 13, wherein the potential discount call is not a special service call or toll free

20. The system according to claim 14, further comprising:

means for choosing the access number among a plurality of access numbers for discount telephone providers; and

means for dialing the selected access number of the associated discount telephone provider.

21. A system for routing calls through a discount telephone service, comprising:

means for monitoring a cell phone function keys for outgoing call activity;

means for determining whether the outgoing call is a potential discount call;

means for detecting at least one DTMF tone corresponding to a first predetermined number of said at least one DTMF tone, wherein the means for determining whether the outgoing call is a potential discount call is accomplished by determining whether the first predetermined number of DTMF tones meets a

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predetermined sequence of DTMF tones;

means for collecting the digits corresponding to the discount call; and

means for dialing the access number for a discount telephone provider and the digits corresponding to the discount call.

22.   The system according to claim 21, further comprising:

means for determining whether an access code is required to effectuate said routing; and

means for transmitting said access code through the cell phone when said code is required.

23.   The system according to claim 21, wherein the potential discount call is an international call.

24.   The system according to claim 21, wherein the potential discount call is not a special call or a toll free call.

25.   A system for routing calls through a discount telephone service, comprising:

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a DTMF decoder configured for identifying DTMF tones associated with an outgoing telephone number;

a processor configured for analyzing one or more of the DTMF tones, and configured for determining whether a potential discount call is being made;

a memory configured for collecting the telephone number corresponding to the potential discount call; and

a DTMF generator configured for dialing the access number for a discount service provider and the outgoing telephone number.

26. The system according to claim 25, wherein the processor is further configured for comparing a first predetermined number of said DTMF tones in order to determine whether the outgoing telephone number is a discount call.

27. The system according to claim 26, wherein the predetermined sequence comprises the tone associated with the number zero.

28. The system according to claim 27, wherein the

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tone associated with the number zero is located in a

predetermined position.

29.   The system according to claim 26, wherein the processor is further configured for determining whether an international phone call is being made prior to the detection of a Send Key command.

30.   The system according to claim 26, wherein the processor is further configured for determining whether an access code is required to effectuate said routing, and for transmitting said access code stored in memory over the cell phone when said code is required.

31. The system according to claim 25, wherein the potential discount call is an international call

32.   The system according to claim 25, wherein the potential discount call is not a special type call or toll free call.

33.   The system according to claim 26, wherein the processor is further configured for choosing the access number among a plurality of access numbers for discount

telephone providers, and for dialing the selected access number of the associated discount telephone provider, said dialing is effectuated by the tones generated by the DTMF generator.

34.   A system for routing calls through a discount telephone service, comprising:

an array of Pic I/O pins configured for monitoring a cell phone activity for outgoing call, said array comprising of at least one Pic I/O pin;

a DTMF encoder configured for detecting the DTMF tones associated with an outgoing telephone number,

a processor configured for determining whether the outgoing call is a discount call by determining whether the predetermined number of dialed digits comprises a predetermined sequence of at least one DTMF tone that is dialed by a user;

a memory configured for storing the telephone number corresponding to the discount call; and

a DTMF generator configured for dialing the access number for a discount service provider and the outgoing telephone number.

35.   The system according to claim 34, wherein the processor is further configured for determining whether an access code is required to effectuate said routing, and for transmitting said access code over the cell phone when said code is required.

36.   The system according to claim 34, wherein the potential discount call is an international call.

37.   The system according to claim 34, wherein the potential discount call is not a special type call or a toll free call.

38.   A cell phone comprising the router of claim 21.

39.   A cell phone comprising the router of claim 34.

40.   Computer executable software code stored on a computer readable medium, the code for routing calls through a discount telephone service, comprising:

        code for determining whether an outgoing call is a discount call;

        code for collecting the digits corresponding to the discount call; and

        code for dialing the access number for a discount telephone service provider and the digits corresponding to the discount call.

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41.   A computer readable medium having
computer executable software code stored thereon, the code
for routing calls through a discount telephone service,
comprising:

code for determining whether an outgoing
call is a discount call;

code for collecting the digits corresponding
to the discount call; and

code for dialing the access number for a
discount telephone service provider and the digits
corresponding to the discount call.

42.   A programmed computer for routing calls
through a discount telephone service, comprising:

a memory having at least one region for
storing computer executable program code; and

a processor for executing the program code
store in memory, wherein the program code includes:

code for determining whether an outgoing
call is a discount call;

code for collecting the digits corresponding
to the discount call; and

code for dialing the access number for a
discount telephone service provider and the digits

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corresponding to the discount call.

43. Computer executable software code stored on a computer readable medium, the code for routing calls through a discount telephone service, comprising:

code for monitoring a cell phone for outgoing call activity;

code for determining whether the outgoing call is a potential discount call;

code for detecting the DTMF tones corresponding to a first predetermined number of DTMF tones, wherein the determining whether the outgoing call is a potential discount call is accomplished by determining whether the first predetermined number of at least one DTMF tone meets a predetermined sequence of the DTMF tones;

code for collecting the digits corresponding to the discount call; and

code for dialing the access number for a discount cell phone provider and the digits corresponding to the discount call.

44. A computer readable medium having

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Computer executable software code stored thereon, the code for routing calls through a discount telephone service, comprising:

code for monitoring a cell phone activity for outgoing call;

code for determining whether the outgoing call is a potential discount call;

code for detecting the DTMF tones corresponding to a first predetermined number of DTMF tones, wherein the determining whether the outgoing call is a potential discount call is accomplished by determining whether the first predetermined number of at least one DTMF tone meets a predetermined sequence of the DTMF tones;

code for collecting the digits corresponding to the discount call;

code for determining whether all of the numbers associated with the discount call have been collected within a predetermined polling period; and

code for dialing the access number for a discount telephone provider and the digits corresponding to the discount call.

45.   A programmed computer for routing calls

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through a discount telephone service, comprising:

a memory having at least one region for storing computer executable program code; and

a processor for executing the program code store in memory, wherein the program code includes:

code for monitoring a cell phone activity for outgoing call;

code for determining whether the outgoing call is a potential discount call;

code for detecting the DTMF tones corresponding to a first predetermined number of DTMF tones, wherein the determining whether the outgoing call is a potential discount call is accomplished by determining whether the

first predetermined number of at least one DTMF tone meets a predetermined sequence of the DTMF tones;

code for collecting the digits corresponding to the discount call; and

code for dialing the access number for a discount telephone provider and the digits corresponding to the discount call.

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